Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2770	chitosan same (link\$3 crosslink\$3 cross link\$3)	US-PGPUB; USPAT	ADJ	ON	2006/01/13 10:39
L2	1282	gelatin and I1	US-PGPUB; USPAT	ADJ	ON	2006/01/13 10:39
L3	2759	gelatin with chitosan	US-PGPUB; USPAT	AD3	ON	2006/01/13 10:40
L4	626	13 and 12	US-PGPUB; USPAT	ADJ	ON	2006/01/13 10:40
L5	34	chitosan same (transglutaminase or tyrosinase)	US-PGPUB; USPAT	ADJ	ON	2006/01/13 10:40
L6	12	I5 and I4	US-PGPUB; USPAT	ADJ	ON	2006/01/13 10:40

=> set plurals on
SET COMMAND COMPLETED

FULL ESTIMATED COST

=> index bioscience FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 92.16 92.37

ENTRY

0.21

SESSION

0.21

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 10:44:40 ON 13 JAN 2006

70 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view search error messages that display as 0* with SET DETAIL OFF.

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=> s chitosan(s)(link? or crosslink? or cross link?)
              FILE ADISCTI
              FILE ADISINSIGHT
          1
              FILE AGRICOLA
         46
              FILE ANABSTR
         52
              FILE ANTE
         58
         14
              FILE AQUALINE
              FILE AQUASCI
         18
        197
              FILE BIOENG
              FILE BIOSIS
        382
              FILE BIOTECHABS
        210
        210
              FILE BIOTECHDS
        159
              FILE BIOTECHNO
         71
              FILE CABA
       2110
              FILE CAPLUS
              FILE CEABA-VTB
        116
              FILE CIN
          1
              FILE CONFSCI
          6
              FILE CROPU
          3
  20 FILES SEARCHED...
        108
             FILE DDFU
              FILE DGENE
        111
         38
              FILE DISSABS
              FILE DRUGU
        158
         15
              FILE EMBAL
        390
              FILE EMBASE
              FILE ESBIOBASE
        202
              FILE FEDRIP
          5*
         57
              FILE FSTA
         88
              FILE GENBANK
          2
  36 FILES SEARCHED...
        408
              FILE IFIPAT
              FILE IMSDRUGNEWS
              FILE IMSRESEARCH
              FILE JICST-EPLUS
        162
              FILE KOSMET
          9
         98
              FILE LIFESCI
              FILE MEDLINE
        306
              FILE NTIS
         10
              FILE OCEAN
          3
```

FILE PASCAL

FILE PHIN

699

6

```
38
            FILE PROMT
      883
            FILE SCISEARCH
            FILE TOXCENTER
      388
            FILE USPATFULL
     2599
            FILE USPAT2
      269
65 FILES SEARCHED...
      16
            FILE WATER
      922
            FILE WPIDS
       13
            FILE WPIFV
      922
            FILE WPINDEX
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=> d rank

49 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L1 QUE CHITOSAN(S) (LINK? OR CROSSLINK? OR CROSS LINK?)

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F1
           2599
                  USPATFULL
F2
           2110
                   CAPLUS
F3
            922
                  WPIDS
            922
                  WPINDEX
F4
            883
F5
                   SCISEARCH
            699
F6
                   PASCAL
F7
            408
                   IFIPAT
F8
            390
                   EMBASE
F9
            388
                  TOXCENTER
            382
F10
                  BIOSIS
            306
                  MEDLINE
F11
F12
            269
                  USPAT2
            210
                  BIOTECHABS
F13
F14
            210
                  BIOTECHDS
            202
F15
                   ESBIOBASE
F16
            197
                   BIOENG
F17
            162
                   JICST-EPLUS
            159
                   BIOTECHNO
F18
            158
                   DRUGU
F19
            116
                   CEABA-VTB
F20
            111
F21
                  DGENE
            108
F22
                  DDFU
F23
             98
                  LIFESCI
F24
             88
                  FSTA
F25
             71
                  CABA
             58
                   ANTE
F26
             57
                   FROSTI
F27
F28
             52
                   ANABSTR
             46
F29
                   AGRICOLA
F30
             38
                   DISSABS
F31
             38
                   PROMT
             18
F32
                   AQUASCI
F33
             16
                   WATER
             15
F34
                   EMBAL
F35
             14
                   AQUALINE
             13
F36
                   WPIFV
F37
             10
                   NTIS
F38
              9
                   KOSMET
              6
F39
                   CONFSCI
              6
                   PHIN
F40
F41
              5*
                  FEDRIP
              3
F42
                   CROPU
              3
F43
                   OCEAN
              2
F44
                   ADISCTI
              2
F45
                   GENBANK
              1
                   ADISINSIGHT
F46
F47
              1
                   CIN
F48
              1
                   IMSDRUGNEWS
                   IMSRESEARCH
F49
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=> file f2-f11 COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 3.66 96.03

```
Ļ2
          6488 L1
=> s gelatin and 12
L3
           496 GELATIN AND L2
=> s gelatin(s)chitosan
          2114 GELATIN(S) CHITOSAN
L4
=> s 14 and 13
           427 L4 AND L3
=> s chitosan(P)(transglutaminase or tyrosinase or glutamine or tyrosine)
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'CHITOSAN(P) (TRANSGLUT'
           748 CHITOSAN(P) (TRANSGLUTAMINASE OR TYROSINASE OR GLUTAMINE OR TYROS
               INE)
=> s 16 and 15
            41 L6 AND L5
=> dup rem 17
PROCESSING COMPLETED FOR L7
             30 DUP REM L7 (11 DUPLICATES REMOVED)
=> s 18 and py<2003
   2 FILES SEARCHED...
   4 FILES SEARCHED...
L9
             2 L8 AND PY<2003
=> d bib abs 1-2
     ANSWER 1 OF 2 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on
     STN
     1994:705753 SCISEARCH
AΝ
     The Genuine Article (R) Number: PP117
GA
     TYROSINASE-MEDIATED QUINONE TANNING OF CHITINOUS MATERIALS
TΤ
ΑIJ
     MUZZARELLI R A A (Reprint); ILARI P; XIA W S; PINOTTI M; TOMASETTI M
     UNIV ANCONA, FAC MED, I-60100 ANCONA, ITALY (Reprint); UNIV ANCONA, DEPT
CS
     MECH, I-60100 ANCONA, ITALY
CYA
     CARBOHYDRATE POLYMERS, ( ***1994*** ) Vol. 24, No. 4, pp. 295-300.
SO
     ISSN: 0144-8617.
     ELSEVIER SCI LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD, OXON,
PB
     ENGLAND OX5 1GB.
DT
     Article; Journal
FS
     PHYS; LIFE; AGRI
     English
LA
REC
     Reference Count: 13
     Entered STN: 1994
ED
     Last Updated on STN: 1994
     *ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS*
AB
          Stable and self-sustaining gels were obtained from
                                                                ***tyrosine***
     glucan (a modified
                          ***chitosan***
                                          synthesized with
     4-hydroxyphenylpyruvic acid) in the presence of
                                                        ***tyrosinase***
     Similar gels were obtained from 3-hydroxybenzaldehyde,
     4-hydroxybenzaldehyde and 3,4-dihydroxybenzaldehyde: all of them were
     hydrolyzed by lysozyme, lipase and papain. Microcapsules were similarly
     obtained by introducing
                               ***tyrosinase***
                                                  in a water-in-oil emulsion
                  ***tyrosine***
                                   glucan in the water phase. No
     containing
        ***linking***
                        was observed for
                                           ***chitosan***
                                                            derivatives of
     vanillin, syringaldehyde and salicylaldehyde. Collagen- ***chitosan***
     -tannin mixtures were also studied under the catalytic action of
       ***tyrosinase*** : partially crystalline, hard, mechanically resistant
     and scarcely wettable materials were obtained upon drying. By contrast,
                                                          ***gelatin***
     products obtained from albumin, pseudocollagen and
                                               ***chitosan***
     the presence of a number of phenols and
     comparable conditions, were brittle.
L9
     ANSWER 2 OF 2
                    IFIPAT COPYRIGHT 2006 IFI on STN
ΑN
      02226305
               IFIPAT; IFIUDB; IFICDB
      MICROWAVE BROWNING COMPOSITION; FOR COATING A FOOD PRODUCT; AMINO ACID
TI
      ENCAPSULATED IN A LIPOSOME HAVING A REDUCING SUGAR IN THE EXTERNAL
      AQUEOUS PHASE
INF
      Haynes, Lynn C, Morris Plains, NJ
      Levine, Harry, Morris Plains, NJ
```

Nabisco Brands, Inc, East Hanover, NJ Nabisco Brands Inc (7734) PAF PA EXNAM Czaja, Donald E EXNAM Federman, Evan PΙ US 5089278 Α 19920218 (CITED IN 007 LATER PATENTS) US 1989-360582 ΑI 19890602 XPD 2 Jun 2009 FIUS 5089278 19920218 Utility; REASSIGNED; EXPIRED DT FS CHEMICAL GRANTED MRN 005132 MFN: 0836 006059 0606 008579 0766 CLMN GΙ 1 Drawing Sheet(s), 1 Figure(s). A heat- or microwave-activated browning composition is prepared for AB coating a food product to produce surface browning on exposure to heat or microwave energy. A method of browning a food product includes the steps of coating a food product with a microwaveable browning composition and subjecting the coated product to heat or microwave energy. The microwaveable browning composition includes at least one liposome-encapsulated Maillard browning reagent. A basic amino acid is encapsulated in the aqueous interior of the liposome. A reducing sugar is dissolved in the external aqueous phase of the liposome. The external aqueous phase may also contain a film-forming material. The Maillard browning reaction is triggered by heat or microwave energy. This heat or microwave energy causes the liposomes to rupture, releasing amino acid to react with reducing sugar, producing Maillard browning products. If a basic amino acid is used, the reaction is further catalyzed by a rise in pH of the external aqueous phase upon release of the amino acid from the liposome. Furthermore, phospholipids (from which the liposome vesicles are made) can enhance the extent and rate of Maillard browning product formation. CLMN GΙ 1 Drawing Sheet(s), 1 Figure(s). => d his

Haynes Lynn C; Levine Harry; Mathewson Paul; Otterburn Michael S

(FILE 'HOME' ENTERED AT 10:44:12 ON 13 JAN 2006)

FILE 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ESBIOBASE, FEDRIP, ...' ENTERED AT 10:44:22 ON 13 JAN 2006

SET PLURALS ON

Mathewson, Paul, Whippany, NJ

ΙN

Otterburn, Michael S, Randolph, NJ

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 10:44:40 ON 13 JAN 2006 SEA CHITOSAN(S) (LINK? OR CROSSLINK? OR CROSS LINK?)

```
2
       FILE ADISCTI
   1
       FILE ADISINSIGHT
  46
       FILE AGRICOLA
  52
       FILE ANABSTR
  58
       FILE ANTE
  14
       FILE AQUALINE
 18
       FILE AOUASCI
 197
       FILE BIOENG
 382
       FILE BIOSIS
210
       FILE BIOTECHABS
       FILE BIOTECHDS
 210
 159
       FILE BIOTECHNO
  71
       FILE CABA
2110
       FILE CAPLUS
 116
       FILE CEABA-VTB
       FILE CIN
   1
       FILE CONFSCI
   6
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FILE CROPU
• • • •
             108
                    FILE DDFU
                   FILE DGENE
             111
                   FILE DISSABS
              38
                   FILE DRUGU
             158
                   FILE EMBAL
              15
             390
                   FILE EMBASE
             202
                   FILE ESBIOBASE
               5*
                    FILE FEDRIP
               57
                    FILE FROSTI
              88
                    FILE FSTA
                    FILE GENBANK
               2
             408
                   FILE IFIPAT
               1
                   FILE IMSDRUGNEWS
                    FILE IMSRESEARCH
             162
                    FILE JICST-EPLUS
               9
                    FILE KOSMET
              98
                    FILE LIFESCI
                   FILE MEDLINE
             306
                   FILE NTIS
              10
                   FILE OCEAN
               3
              699
                   FILE PASCAL
               6
                   FILE PHIN
               38
                   FILE PROMT
             883
                   FILE SCISEARCH
             388
                   FILE TOXCENTER
            2599
                   FILE USPATFULL
             269
                   FILE USPAT2
              16
                   FILE WATER
             922
                    FILE WPIDS
              13
                    FILE WPIFV
                   FILE WPINDEX
              922
                 QUE CHITOSAN(S) (LINK? OR CROSSLINK? OR CROSS LINK?)
L1
     FILE 'CAPLUS, WPIDS, SCISEARCH, PASCAL, IFIPAT, EMBASE, TOXCENTER,
     BIOSIS, MEDLINE' ENTERED AT 10:48:02 ON 13 JAN 2006
L2
           6488 S L1
L3
            496 S GELATIN AND L2
           2114 S GELATIN(S)CHITOSAN
L4
            427 S L4 AND L3
L5
            748 S CHITOSAN(P) (TRANSGLUTAMINASE OR TYROSINASE OR GLUTAMINE OR TY
L6
L7
              41 S L6 AND L5
              30 DUP REM L7 (11 DUPLICATES REMOVED)
rs
L9
               2 S L8 AND PY<2003
=> log y
COST IN U.S. DOLLARS
                                                    SINCE FILE
                                                                     TOTAL
                                                         ENTRY
                                                                   SESSION
                                                        100.18
                                                                    196.21
FULL ESTIMATED COST
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STN INTERNATIONAL LOGOFF AT 11:02:52 ON 13 JAN 2006